REMOTE-READY LOG SET AND BURNER SYSTEM MODELS



MF42ONE, MF42OPE, MF48ONE, MF48OPE
MF42 MODELS MAY BE USED WITH LMF42-SC LOGS ONLY
MF48 MODELS MAY BE USED WITH LMF48-SC LOGS ONLY



WHEN USED AS AN OUTDOOR APPLIANCE



CARBON MONOXIDE WARNING

- This appliance can produce carbon monoxide which has no odor.
- Using it in an enclosed space can kill you.
- Neverusethis appliance in an enclosed space such as a camper, tent, car or home.

♣ DANGER

IF YOU SMELL GAS:

1. Shut off gas to appliance.

A WARNING: For Outdoor Use Only.

- 2. Extinguish any open flame.
- 3. If odor continues, keep away from the appliance and immediately call your gas supplier or fire department.

⚠ WARNING: No not store gasoline or other flamable vapors and liquids in the vicinity of this or any other appliance. An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.

⚠ WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

WHEN USED AS INDOOR VENTED APPLIANCE

A WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

INSTALLER: Leave this manual with the appliance. CONSUMER: Retain this manual for future reference.

TABLE OF CONTENTS

Safety	
Product Identification Wiring Diagram	
Local Codes4 Troubleshooting4	
Unpacking4 Accessories	
Product Features4 Parts4	
Installation4 Service Hints	
Operation14 Technical Service	
Inspecting Burners15 Replacement Parts	
Cleaning and Maintenance	

SAFETY

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

▲ WARNING: This appliance is for installation only in a solid-fuel burning masonry or UL127 factory-built fireplace or in a listed unvented vent free outdoor fireplace. Do not install this appliance in an unvented fireplace indoors.

A WARNING: Fireplace must be operated only with doors fully open.

This appliance may be installed in an aftermarket,* permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

* Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer

⚠ WARNING: This product contains and/or generates chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate or service this fireplace. Improper use of this fireplace can cause serious injury or death from burns, fire, explosion, electrical shock and carbon monoxide poisoning.

▲ DANGER: Carbon monoxide poisoning may lead to death!

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness or nausea. If you have these signs, the fireplace may not be working properly. Get fresh air at once! Have fireplace serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol and those at high altitudes.

Natural and Propane/LP gases are odorless. An odor-making agent is added to these gases. The odor helps you detect a gas leak. However, the odor added to the gas can fade. Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.

A WARNING: Any change to this appliance or its controls can be dangerous.

Solid fuels shall not be burned in a fireplace where a decorative appliance is installed.

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

Do not place clothing or other flammable material on or near the appliance. Never place any objects on the appliance.

Appliance base assembly becomes very hot when running appliance. Keep children and adults away from hot surface to avoid burns or clothing ignition. Appliance will remain hot for a time after shutdown. Allow surface to cool before touching.

Carefully supervise young children when they are in the room with appliance. When using the hand-held remote accessory, keep selector switch in the OFF position to prevent children from turning on burners with remote.

SAFETY

Continued

You must operate this appliance with the fireplace screen and hood in place. Make sure fireplace screen and hood are in place before running appliance.

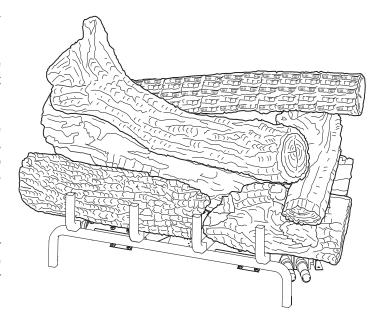
Keep the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

- 1. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.
- 2. Do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors (propane/LP units only).
- 3. If you smell gas
 - ·shut off gas supply
 - •do not try to light any appliance
 - do not touch any electrical switch; do not use any phone in your building
 - •immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
 - if you cannot reach your gas supplier, call the fire department
- 4. This appliance shall not be installed in a bedroom or bathroom, unless installed as a vented appliance. See <u>Installing Damper Clamp Accessory for Vented Operation</u>, page 6. This gas log set may not be installed as a vented appliance in a bedroom or bathroom in the Commonwealth of Massachusetts.
- 5. Before installing in a solid fuel burning fireplace, the chimney flue and firebox must be cleaned of soot, creosote, ashes and loose paint by a qualified chimney cleaner. Creosote will ignite if highly heated. A dirty chimney flue may create and distribute soot within the house. Inspect chimney flue for damage. If damaged, repair flue and firebox before operating appliance.
- If fireplace has glass doors, never operate this appliance with glass doors closed. If you operate appliance with doors closed, heat buildup inside fireplace will cause glass to burst. Make sure there are no obstructions across openings of fireplace.
- 7. To prevent the creation of soot, follow the instructions in *Cleaning and Maintenance*, page 16.
- 8. Before using furniture polish, wax, carpet cleaner or similar products, turn appliance off. If heated, the vapors from these products may create a white powder residue within burner box or on adjacent walls and furniture.
- 9. Do not use this appliance as a wood burning appliance. Use only the logs provided with the appliance. Do not burn solid fuels in this appliance.
- 10.Do not run appliance
 - where flammable liquids or vapors are used or storedunder dusty conditions
- 11.Do not use this appliance to cook food or burn paper or

- other objects.
- 12.Do not use this appliance if any part has been exposed to or under water. Immediately call a qualified service technician to inspect the room appliance and to replace any part of the control system and any gas control which has been under water.
- 13.Do not operate appliance if any log is broken.
- 14. Turn appliance off and let cool before servicing, installing or repairing. Only a qualified service person should install, service or repair appliance.
- 15. This appliances must not be connected to any external electrical source.
- 16. Operating appliance above elevations of 4,500 feet may cause pilot outage.
- 17.To prevent performance problems, do not use propane/LP fuel tank of less than 100 lb. capacity (propane/LP units only).
- 18. Provide adequate clearances around air openings.
- 19.Do not operate fireplace if any log is broken.

If used with MFEB accessory ember burner, this appliance shall only be installed in a wood burning fireplace.

PRODUCT IDENTIFICATION



MF Model Series

Figure 1 - Product Identification

LOCAL CODES

Install and use appliance with care. Follow all local codes. In the absence of local codes, use the latest edition of *The National Fuel Gas Code*, *ANSI Z223.1/NFPA 54**.

*Available from:

American National Standards Institute, Inc. 1430 Broadway New York, NY 10018 National Fire Protection Association, Inc. Batterymarch Park Quincy, MA 02269

State of Massachusetts: The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

Sellers of unvented propane or natural gas-fired supplemental room appliances shall provide to each purchaser a copy of 527 CMR 30 upon sale of the unit.

Vent-free gas products are prohibited for bedroom and bathroom installation in the Commonwealth of Massachusetts.

UNPACKING

A CAUTION: Do not remove the data plates from the grate assembly. The data plates contain important warranty and safety information.

- 1. Remove logs and appliance base assembly from carton(s).
- 2. Remove all protective packaging applied to logs and appliance for shipment.
- Check appliance for any shipping damage. If appliance is damaged call FMI PRODUCTS, LLC at 1-866-328-4537 for replacement parts before returning to dealer.

PRODUCT FEATURES

OPERATION

This appliance is dual listed as a vented decorative gas appliance to ANSI Z21.60 for use indoors in wood burning fireplaces and as an outdoor decorative gas appliance to ANSI Z21.97. When operated as an outdoor decorative gas appliance, it must be installed outdoors in a site built wood wood burning fireplace or a UL 127 listed wood burning fireplace designed for outdoor use or in an unvented outdoor fireplace.

ELECTRONIC IGNITION SYSTEM

This appliance has an electronic ignitor to light appliance fuel supply.

INSTALLATION

MARNING: A qualified service person must install appliance. Follow all local codes.

NOTICE: State or local codes may only allow operation of this appliance in a vented configuration. Check your state or local codes.

AWARNING: Make sure the selector switch is in the OFF position before installing appliance.

A WARNING: Never install the appliance

- in a recreational vehicle
- where curtains, furniture, clothing or other flammable objects are less than 36" from front, 42" from top of appliance; for side clearances see Figure 2, page 5
- in high traffic areas
- · in windy or drafty areas

OUTDOOR ENCLOSURE REQUIREMENTS

This appliance is considered to be installed outdoors if installed with shelter no more inclusive than:

- 1. With walls on all sides, but with no overhead cover;
- 2. Within a partial enclosure wich includes an overhead cover and no more than two side walls. These side walls may be parallel, as in a breezeway or at right angles to each side; or
- 3. Within a partial enclosure which includes an overhead cover and three side walls; as long as 30% or more of the horizontal periphery of the enclosure is permanently open.

This appliance must be installed in an approved fireplace. When installed indoors or either indoors or outdoors with optional ember burner MFEB, the appliance must be installed in a wood burning fireplace with the flue damper in the open position. This appliance may only be installed in a fireplace with no flue when installed in an approved outdoor fireplace. When installed in an outdoor fireplace with no flue, optional ember burner MFEB may not be used.

CHECK GAS TYPE

Use the correct type of gas (natural or propane/LP). If your gas supply is not the correct gas type, do not install appliance. Call dealer where you bought appliance for proper type appliance.

▲ WARNING: This appliance is equipped for either natural gas or propane/LP gas but not both. Gas type is indicated on the rating plate. Field conversion is not permitted.

INSTALLATION AND CLEARANCES

A WARNING: Maintain the minimum clearances. If you can, provide greater clearances from floor, ceiling and adjoining wall.

Continued

MINIMUM FIREPLACE CLEARANCE TO COMBUSTIBLE MATERIALS

Side Wall 16", Ceiling 42" Floor 5", Front: 36"

LOG SIZING REQUIREMENTS						
Minimum Firebox Size						
Size Height Depth Front Rea Width Wid						
42"	29"	15.5"	39"	26.75"		
48"	29"	20"	47"	33"		

Carefully follow the instructions below. This will ensure safe installation into a masonry, UL127-listed manufactured fire-place or listed vent-free firebox.

Minimum Clearances For Side Combustible Material, Side Wall and Ceiling

A. Clearances from the side of the fireplace cabinet to any combustible material and wall should follow diagram in Figure 2. Example: The face of a mantel, bookshelf, etc. is made of combustible material and protrudes 3 ¹/2" from the wall. This combustible material must be 4" from the side of the fireplace cabinet (see Figure 2).

Note: When installing your gas logs into a manufactured firebox, follow firebox manufacturer's instructions for minimum clearances to combustible materials.

B. Clearances from the top of the fireplace opening to the ceiling should not be less than 42".

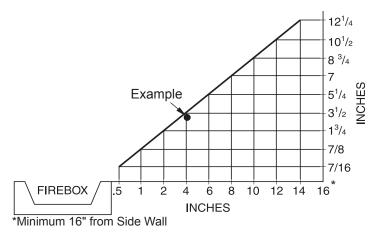


Figure 2 - Minimum Clearance for Combustible to Wall Minimum Noncombustible Material Clearances

If Not Using Mantel

Note: If using a mantel proceed to <u>If Using Mantel</u>. If not using a mantel, follow these instructions.

You must have noncombustible material(s) above the fireplace opening. Noncombustible materials (such as slate, marble, tile, etc.) must be at least 1/2" thick. With sheet metal, you must have noncombustible material behind it. Noncombustible material must extend at least 8" up (for all models). If noncombustible material is less than 12", you must install the fireplace hood accessory (24" and 30" Models Only). See Figure 3 for minimum clearances.

Noncombustible Material Distance (A)	Requirements for Safe Installation
12" or more	Noncombustible material OK.
Between 8" and 12"	Install fireplace hood accessory (GA6050 or GA6053 see <i>Accessories</i> , page 21).
Less than 8"	Noncombustible material must be extended to at least 8". See <u>Between 8" and 12"</u> , above. If you cannot extend material, you must operate appliance with flue damper open.

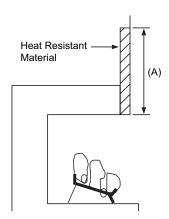


Figure 3 - Heat Resistant Material (Slate, Marble, Tile, etc.) Above Fireplace

If Using Mantel

You must have noncombustible material(s) above the fireplace opening. Noncombustible materials (such as slate, marble, tile, etc.) must be at least 1/2" thick. With sheet metal, you must have noncombustible material behind it. Noncombustible material must extend at least 8" up (for all models). If noncombustible material is less than 12", you must install the fireplace hood accessory. Even if noncombustible material is more than 12", you may need the hood accessory to deflect heat away from your mantel shelf. See Figure 3 and Figures 4 and 5, page 6, for minimum clearances.

IMPORTANT: If you cannot meet these minimum clearances, you must operate appliance with chimney flue damper open. Go to *Installing Damper Clamp Accessory for Vented Operation*, page 7.

MANTEL CLEARANCES

In addition to meeting noncombustible material clearances, you must also meet required clearances between fireplace opening and mantel shelf. If you do not meet the clearances listed below, you will need a hood.

Determining Minimum Mantel Clearance

If you meet minimum clearance between mantel shelf and top of fireplace opening, a hood is not required (see Figure 4, page 6).

Continued

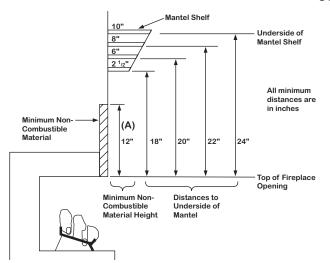


Figure 4 - Minimum Mantel Clearances Without Using Hood
Determining Minimum Mantel Clearance When Using a
Hood

If minimum clearances in Figure 4, are not met, you must have a hood. When using a hood there are still certain minimum mantel clearances required. Follow minimum clearances shown in Figure 5, when using hood.

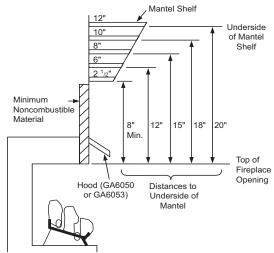


Figure 5 - Minimum Mantel Clearances When Using Hood

NOTICE: Surface temperatures of adjacent walls and mantels become hot during operation. Walls and mantels above the firebox may become hot to the touch. If installed properly, these temperatures meet the requirement of the national product standard. Follow all minimum clearances shown in this manual.

NOTICE: If your installation does not meet the minimum clearances shown, you must do one of the following:

- operate the logs only with the flue damper open
- raise the mantel to an acceptable height
- remove the mantel

FLOOR CLEARANCES

- A. If installing appliance on the floor level, you must maintain the minimum distance of 14" to combustibles (see Figure 6).
- B. If combustible materials are less than 14" to the fireplace, you must install appliance at least 5" above the combustible flooring (see Figure 7).

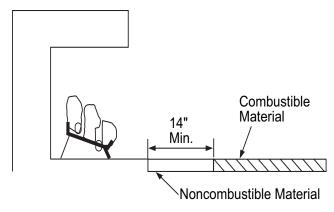


Figure 6 - Minimum Fireplace Clearances If Installed at Floor Level

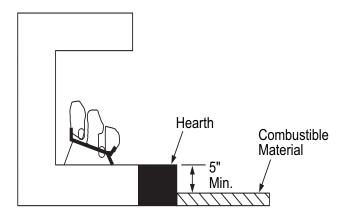


Figure 7 - Minimum Fireplace Clearances Above Combustible Flooring

INSTALLING DAMPER CLAMP ACCESSORY FOR VENTED OPERATION

Note: When used as a vented indoor appliance, appliance must be installed only in a solid-fuel burning fireplace with a working flue and constructed of noncombustible material.

For Massachusetts Residents Only: Installation of this gas log set as a vented indoor appliance in the Commonwealth of Massachusetts requires the damper be permanently removed or welded in the fully open position.

You must install the damper clamp accessory (to order, see *Accessories*, page 21). This will insure vented operation (see Figure 8). The damper clamp will keep damper open. Installation instructions are included with clamp accessory.

See chart below for minimum permanent flue opening you must provide. Attach damper clamp so the minimum permanent flue opening will be maintained at all times.

Continued

Area of Various Standard Round Flues				
Diameter	Area			
5"	20 sq. inches			
6"	29 sq. inches			
7"	39 sq. inches			
8"	51 sq. inches			

Chimney Height	M	inimum Permanent Flue Opening
6' to 15'		39 sq. inches
15' to 30'		29 sq. inches

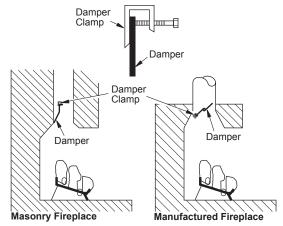


Figure 8 - Attaching Damper Clamp

INSTALLING APPLIANCE BASE ASSEMBLY

INSTALLING APPLIANCE BASE ASSEMBLY

⚠ WARNING: You must secure this appliance to fireplace floor. If not, appliance will move when you adjust controls. Moving appliance may cause a gas leak.

▲ WARNING: If installing in a sunken fireplace, special care is needed. You must raise the fireplace floor to allow access to appliance control panel. This will insure adequate air flow and guard against sooting and controls being damaged. Raise fireplace floor with noncombustible material. Make sure material is secure.

Installation Items Needed

- hardware package (provided with appliance)
- approved flexible gas hose and fittings provided (if allowed by local codes)
- sealant (resistant to propane/LP gas, not provided)
- · electric drill with 3/16" masonry drill bit
- Apply pipe joint sealant lightly to male threads of the 1/2 NPT side of gas fitting elbow (provided) and connect to inlet side of gas control. Remove gas fitting from flexible gas hose (provided) before connecting to elbow (see Figure 9).
- 2. Position appliance base assembly in fireplace.
- Mark screw locations through holes in front panel of base (see Figure 10, page 8). If installing in a brick-bottom fireplace, mark screw locations in mortar joint of bricks.
- 4. Remove appliance base from fireplace.
- 5. Drill holes at marked locations using 3/16" drill bit.
- 6. Attach base, through holes in back side panels of base, to fireplace floor using masonry screws provided in hardware package (see Figure 10, page 8).
- 7. Connect to gas supply. See <u>Connecting To Gas Supply</u>, page 8.

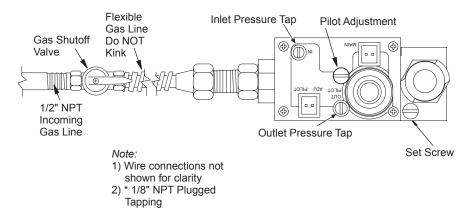


Figure 9 - Connecting Incoming Gas Line to Flex Gas Line

Continued

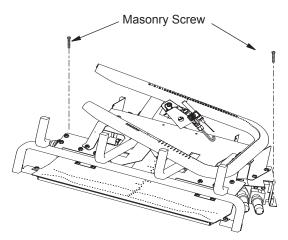


Figure 10 - Attaching Base to Fireplace Floor (Model Shown May Vary from Actual Model)

CONNECTING TO GAS SUPPLY

★ WARNING: This appliance requires a 1/2" NPT (National Pipe Thread) inlet connection to the pressure regulator.

⚠ WARNING: A qualified service person must connect appliance to gas supply. Follow all local codes.

A CAUTION: Never connect propane/LP fireplace directly to the propane/LP supply. This appliance requires an external regulator (not supplied). Install the external regulator between the appliance and propane/LP supply.

▲ WARNING: Never connect natural gas fireplace to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

Installation Items Needed

Before installing appliance, make sure you have the items listed below.

- external regulator (supplied by installer)
- piping (check local codes)
- sealant (resistant to propane/LP gas)
- · equipment shutoff valve *
- · test gauge connection *
- · sediment trap
- tee joint
- · pipe wrench
- approved flexible gas line with gas connector (if allowed by local codes) (not provided)
- * An equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the

optional equipment shutoff valve from your dealer.

For propane/LP units, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11" and 14" of water. If you do not reduce incoming gas pressure, appliance regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 11. Pointing the vent down protects it from freezing rain or sleet.

A CAUTION: Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper gas volume to appliance. If pipe is too small, undue loss of volume will occur.

Installation must include an equipment shutoff valve, union and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from appliance (see Figure 12, page 9).

IMPORTANT: Install equipment shutoff valve in an accessible location. The equipment shutoff valve is for turning on or shutting off the gas to the appliance.

Check your building codes for any special requirements for locating equipment shutoff valve to fireplaces.

Apply pipe joint sealant lightly to male NPT threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged appliance valves.

▲ WARNING: Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

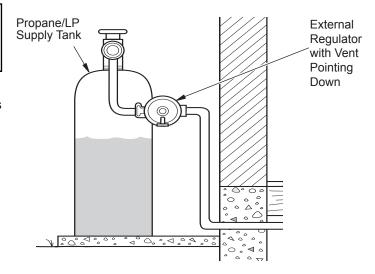


Figure 11 - External Regulator With Vent Pointing Down

Continued

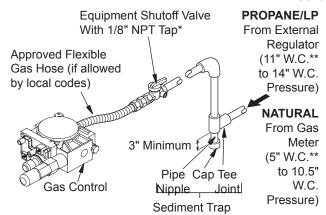


Figure 12 - Gas Connection

- * Purchase the optional equipment shutoff valve from your dealer.
- **Minimum inlet pressure for purpose of input adjustment.

We recommend that you install a sediment trap in supply line as shown in Figure 12. Locate sediment trap where it is within reach for cleaning. Install in piping system between fuel supply and appliance. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into appliance controls. If sediment trap is not installed or is installed wrong, appliance may not run properly.

A CAUTION: Avoid damage to gas control. Hold gas control with wrench when connecting it to gas piping and/or fittings.

CHECKING GAS CONNECTIONS

▲ WARNING: Test all gas piping and connections, internal and external to unit, for leaks after installing or servicing. Correct all leaks at once.

▲ WARNING: Never use an open flame to check for a leak. Apply a noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.

A CAUTION: Make sure external regulator has been installed between propane/LP supply and appliance. See guidelines under <u>Connecting</u> to <u>Gas Supply</u>, page 8.

PRESSURE TESTING GAS SUPPLY PIPING SYSTEM Test Pressures In Excess Of 1/2 PSIG (3.5 kPa)

 Disconnect appliance with its appliance main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig will damage appliance regulator.

- 2. Cap off open end of gas pipe where equipment shutoff valve was connected.
- Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas or opening main gas valve located on or near gas meter for natural gas or using compressed air.
- Check all joints of gas supply piping system. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
- 5. Correct all leaks at once.
- 6. Reconnect appliance and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

Test Pressures Equal To or Less Than 1/2 PSIG (3.5 kPa)

- 1. Close equipment shutoff valve (see Figure 13).
- Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas or opening main gas valve located on or near gas meter for natural gas or using compressed air.
- 3. Check all joints from gas meter to equipment shutoff valve for natural gas or propane/LP supply to equipment shutoff valve for propane/LP (see Figure 14 or Figure 15, page 10). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
- 4. Correct all leaks at once.

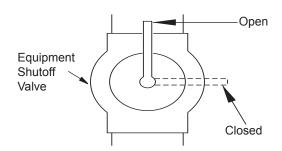


Figure 13 - Equipment Shutoff Valve

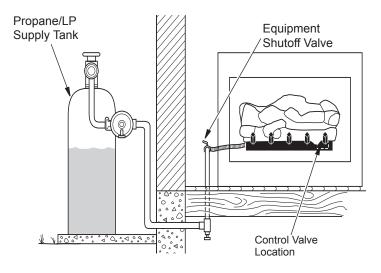


Figure 14- Checking Gas Joints (Propane/LP Only)

Continued

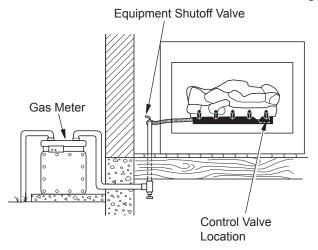


Figure 15 - Checking Gas Joints (Natural Gas Only)

PRESSURE TESTING APPLIANCE GAS CONNECTIONS

- 1. Open equipment shutoff valve (see Figure 13, page 9).
- 2. Open main gas valve located on or near gas meter for natural gas or open propane/LP supply tank valve.
- 3. Make sure control knob of appliance is in the OFF position.
- 4. Check all joints from gas meter to equipment shutoff valve for natural gas or propane/LP supply to equipment shutoff valve for propane/LP (see Figure 14, page 9 or Figure 15, page 10). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
- 5. Correct all leaks at once.
- 6. Light appliance (see *Operation*, page 14). Check all other internal joints for leaks.
- 7. Turn off appliance (see <u>To Turn Off Gas to Appliance</u>, page 14).

INSTALLING BATTERIES IN HAND HELD REMOTE CONTROL AND BATTERY PACK

Installing Batteries in Battery pack

- 1. Remove access cover on battery pack.
- 2. Install 4 AA batteries, included, into battery pack following positive and negative directions.
- 3. Replace access cover on battery pack.
- Place battery pack next control valve away from the burner.

Installing Batteries in Handheld Remote Control

- 1. Remove battery cover on back of remote control.
- 2. Install supplied A23/12V battery following positive and negative directions.
- 3. Replace battery cover onto remote control.

MF SERIES BURNER SYSTEM-LOG COMPATIBILITY CHART				
Burner System Model	Refractory Concrete Logs For Use With This Burner System			
MF42ONE,MF42OPE,	LMF42-SC			
MF48ONE, MF48OPE,	LMF48-SC			

Figure 16 - MF Series Burner System- Log Compatibility
Chart

INSTALLING LOGS AND LAVA ROCK

▲ WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

ACAUTION: After installation and periodically thereafter, check to ensure that no flame comes in contact with any log. With appliance set to Hi, check to see if flames contact any log. If so, reposition logs according to log installation instructions in this manual. Flames contacting logs will create soot.

LMF (42 AND 48)-SC SERIES LOG PLACEMENT

It is very important to install these logs exactly as instructed. Do not modify logs. Only use logs supplied with appliance or as identified for use with the appliance as shown in Figure 18.

Note: Each log includes an identifying number cast in the log. Look at each log when placing them on the burner system to be certain it is correct.

Note: For additional information, go to **www.fmiproducts.com** and click on the technical Support tab for access to log placement videos.

Find the right front log (LMF42-SC: D-019 or LMF48-SC: D027). See Figures 17, 17A, 17B, and 17C for reference.
 The log has a rectangular shape on the bottom that fits against the lip on the black metal base, the square grate, and the round tube burner. Slide the log in place as shown in Figures.

Continued

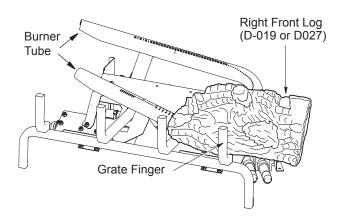


Figure 17 - Installing Right Front Log



Figure 17A - Installing Right Front Log, Top View

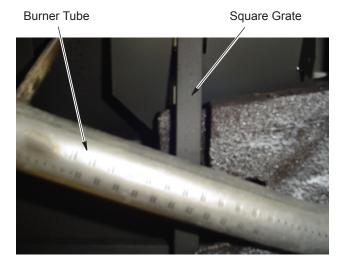


Figure 17B - Installing Right Front Log, Top View

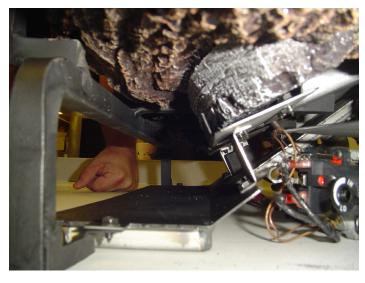


Figure 17C - Installing Right Front Log, Side View

2. Find the back left log (LMF42-SC: D-018 or LMF48-SC: D026). See Figures 18, 18A, and 18B. Figure 18A shows how the log must fit against the end of the burner. Figure 18B shows how the notch in log fits against the vertical portion of the burner tube. Place this log on the base assembly by inserting it from the left side as shown in Figure 18. You will need to twist the log slightly to get it to fit against the burners properly. It will rest even with the back edge of the pan.

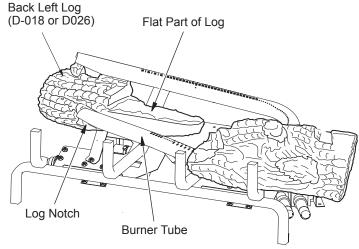


Figure 18 - Installing Back Left Log

Continued

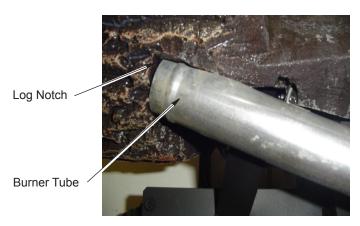


Figure 18A - Installing Back Left Log



Figure 19A - Installing Front Left Log Side View



Vertical Portion of Burner Tube

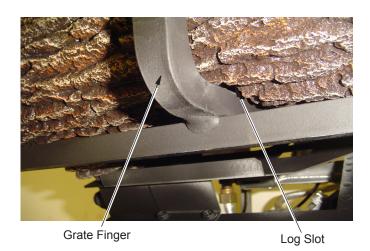


Figure 19B - Installing Front Left Log

Figure 18B - Installing Back Left Log (D-018) Rear View

3. Find the front left log (LMF42-SC: D017 or LMF48-SC: D025). See Figures 19, 19A, and 19B. The log has a rectangular stand off on the bottom that fits against the lip on the black metal base as shown in figure 19A. The bottom of this log has a slot that fits over the second bar on the grate as shown in Figure 19B. Place the log on the base assembly as shown in figures.

4. Find the charred log (D-020). See Figures 20, 20A, and 20B. The log has a slot in the bottom that fits over the square grate and rests against the burner tube as shown in Figure 20. Place this log on the base as shown in figures.

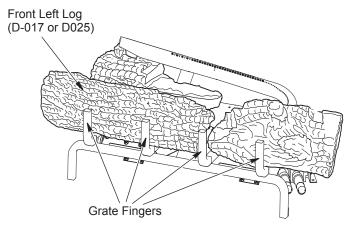


Figure 19 - Installing Front Left Log

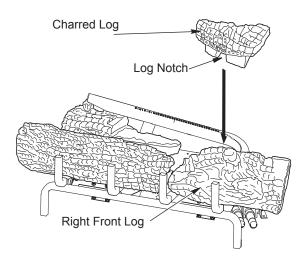


Figure 20 - Installing Charred Log



Figure 20A - Installing Charred Log Top View

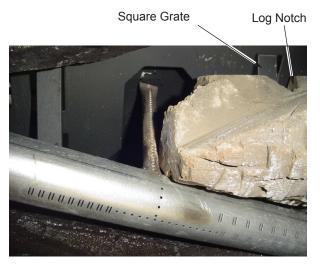


Figure 20B - Installing Charred Log Top Side View

5. Find the middle split log (LMF42-SC: D-021 or LMF48-SC: D028). See Figures 21 and 21A. The split side of the log faces forward. The log has a notch that fits around the burner tube on the right side. The left side of the burner tube fits into the notch on the back side of this log. The log is placed properly when it sits parallel to the tube burner and the square peg is pointing up. See figures for reference.

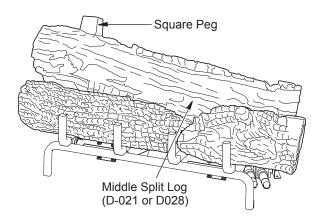


Figure 21 - Installing Middle Split Log (D-021)

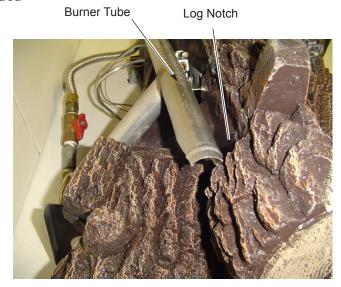


Figure 21A - Installing Middle Split Log Rear Top Side View

6. Find the right split crossover log (D-022) The bottom of the log has a rectangular stand off that fits in the slots on the right side of the front right log and the middle split log. Place this log as shown in Figure 22.

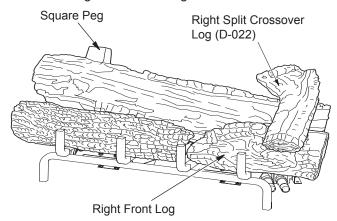


Figure 22 - Installing Right Split Crossover Log

7. Find the front top log (D-024). See Figure 23. The left end of this log has a square hole that fits over a square peg that is on the top of the middle split log. The right end of this log rests behind the knot on the top of the front right log.

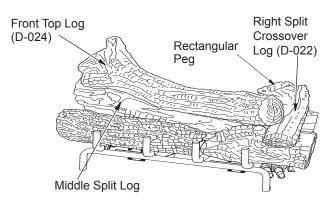


Figure 23 - Installing Front Top Log

Continued

8. Find the back top log (LMF-SC: D-023 or LMF48-SC: D029). See Figures 24, and 24A. The left end of this log has a round hole that fits over the round peg that is on the top of the back left log. The right end of this log has a rectangular hole that fits over the rectangular peg on the top of the right crossover log.

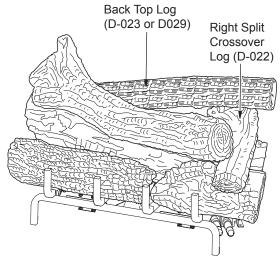


Figure 24 - Installing Back Top Log and Final Assembly



Figure 24A - Installing Back Top Log, Top View

LAVA ROCK PLACEMENT

Place lava rock around the base of the burner assembly on the fireplace floor to simulate an ash bed. Do not place lava rock or any other material on the burner.

OPERATION



FOR YOUR SAFETY READ BEFORE LIGHTING



▲ WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance does not have a pilot, it is equipped with an ignition device which automatically lights the pilot. Do not light pilot by hand.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

 WHAT TO DO IF YOU SMELL GAS
 - •Do not try to light any appliance.
 - •Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- C. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS



- 1. STOP! Read the safety information first.
- 2. Do not attempt to light the burner by hand.
- 3. Turn equipment shutoff valve clockwise to the OFF position (see Figure 25). Do not force.
- 4. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information. If you don't smell gas, go to the next step.
- 5. Turn equipment shutoff valve counterclockwise \(\chi \) to the ON position. Do not force.
- 6. Push remote control "ON" button.
- 7. Visually locate ignitor. Ignitor should begin to spark and main burner should ignite once flame appears at pilot.
 - If lighting appliance for the first time each season, it may take several attempts before supply gas can reach pilot and main burners.
 - If appliance will not stay lit after several attempts, follow instructions under <u>To Turn Off Gas To Appliance</u> and call your service technician or gas supplier.





OPERATION Continued

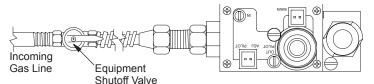


Figure 25 - Turning Equipment Shutoff Valve to the OFF
Position

GAS CONTROL MODULE SYSTEM REMOTE CONTROL FEATURE

The module has a built in remote control receiver that allows the user to program the remote transmitter at any time during or after the installation of the burner.

- 1. There is a switch located on the right side of the module that reads REMOTE/OFF (Figure 26).
- 2. When the remote/off switch is in the OFF position, the burner will operate from the rocker switch or wall switch connected to the two BROWN wires on the module.
- 3. When the remote/off is in the REMOTE position the burner will operate from the Remote Control transmitter.

NOTE: The module must be programmed to the Remote Control transmitter.

- To program the module (make sure the system has power), locate the learn button (Figure 27) on the module. Locate the metal shield that is covering the module and remove the screw on top. Use a small thin object like a paper clip (not sharp points) to press and release the learn button. There will be a beep sound from the module. Then press any button on the remote transmitter. Once the module's internal receiver accepts the transmitter code, there will be a series of confirming beeps.
- · The remote system is ready for use.

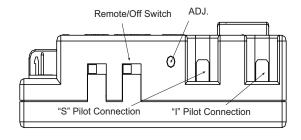


Figure 26 - Gas Module Right Side

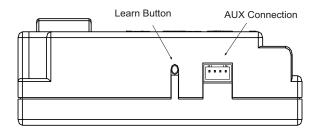


Figure 27 - Gas Module Left Side

INSPECTING BURNERS

Check burner flame patterns often.

IGNITOR ASSEMBLY

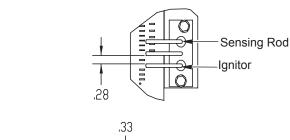
The ignitor assembly is factory preset for proper ignition of the burner. Alterations may have occurred during shipping and handling. Call a qualified service person to readjust the ignitor assembly if necessary.

The ignitor should be positioned as shown in Figure 28.

Note: Figure 28, shows the correct positioning of the ignitor and sensing rod.

If your ignitor assembly does not meet these requirements:

- turn appliance off (see <u>To Turn Off Gas to Appliance</u>, page 14).
- see *Troubleshooting*, page 18



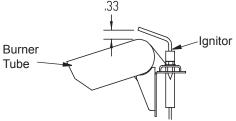


Figure 28 - Ignitor Assembly

BURNER FLAME PATTERN

Figure 29 shows correct burner flame pattern.

NOTICE: Do not mistake orange flames with yellow tipping. Dirt or other fine particles are burned by appliance, causing brief patches of orange flame.

If burner flame pattern is incorrect, as shown in Figure 30, page 16.

- turn appliance off (see <u>To Turn Off Gas to Appliance</u>, page 14)
- see *Troubleshooting*, page 18

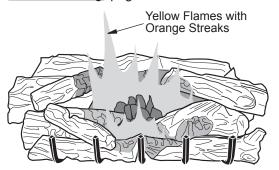


Figure 29 - Correct Burner Flame Pattern

INSPECTING BURNERS

Continued

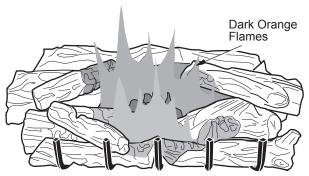


Figure 30 - Incorrect Burner Flame Pattern

CLEANING AND MAINTENANCE

▲ WARNING: Turn off appliance and let cool before cleaning.

A CAUTION: You must keep control areas, burners and circulating air passageways of appliance clean. Inspect these areas of appliance before each use. Have appliance inspected yearly by a qualified service person.

▲ WARNING: Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.

BURNER INJECTOR HOLDER AIR INLET HOLE

The primary air inlet holes allow the proper amount of air to mix with the gas. This provides a clean burning flame. Keep these holes clear of dust, dirt, lint and pet hair. Clean these air inlet holes prior to each heating season. Blocked air holes will create soot. We recommend that you clean the unit every three months during operation and have appliance inspected yearly by a qualified service person.

We also recommend that you keep the burner tube clean and free of dust and dirt. To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store or home center may carry compressed air in a can. If using compressed air in a can, please follow the directions on the can. If you don't follow directions on the can, you could damage the pilot assembly.

- 1. Shut off unit. Allow unit to cool for at least thirty minutes.
- 2. Inspect burner, and primary air inlet holes on injector holder for dust and dirt (see Figure 31).
- 3. Blow air through the ports/slots and holes in the burner.
- 4. Check injector holder located at end of burner tube again. Remove any large particles of dust, dirt, lint or pet hair with a soft cloth or vacuum cleaner nozzle.
- 5. Blow air into the primary air holes on the injector holder.
- 6. In case any large clumps of dust have now been pushed into the burner repeat steps 3 and 4. Additional cleaning may be needed for proper operation based on use/lack of use.

CLEANING AND MAINTENANCE Continued

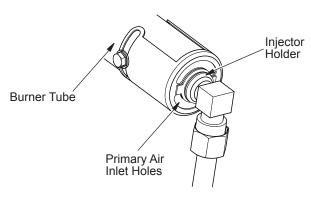


Figure 31 - Injector Holder On Outlet Burner Tube

LOGS

- If you remove logs for cleaning, refer to <u>Installing Logs and Lava Rock</u>, page 10, to properly replace logs.
- Replace log(s) if broken or chipped (dime-sized or larger).

MAIN BURNER

Periodically inspect all burner flame holes with appliance running. All slotted burner flame holes should be open with flame present. All round burner flame holes should be open with a small blue flame present. Some burner flame holes may become blocked by debris or rust, with no flame present. If so, turn off appliance and let cool. Remove blockage, blocked burner flame holes will create soot.

A WARNING: The injector holders (air shutters) are not adjustable. Do not move injector holders from their original positions.

SPECIFICATIONS

MF42ONE AND MF48ONE

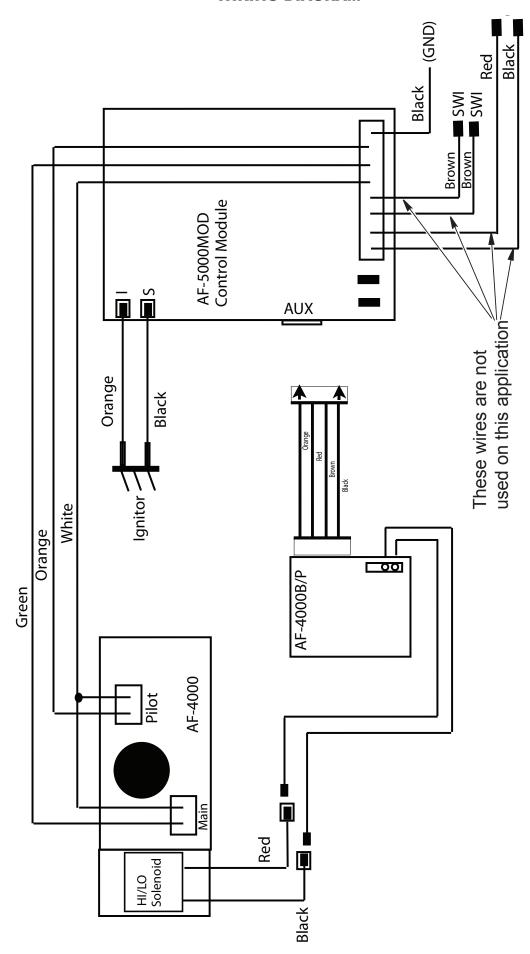
- Rating (Variable): 29,000/40,000 Btu/Hr
- Type Gas: NaturalIgnition: Electronic
- Manifold Pressure: 3.4" W.C.
- Inlet Gas Pressure (in. of water):

Max - 10.5" W.C., Min* - 5" W.C.

*For purpose of input adjustment

MF42OPE AND MF48OPE

- Rating (Variable): 29,000/40,000 Btu/Hr
- Type Gas: Propane/LP
- · Ignition: Electronic
- Manifold Pressure: 10.0" W.C.
- Inlet Gas Pressure (in. of water):
 Max 14" W.C., Min* 11" W.C.
- *For purpose of input adjustment



TROUBLESHOOTING

A WARNING: Turn off appliance and let cool before servicing. Only a qualified service person should service and repair appliance.

Note: All troubleshooting items are listed in order of operation.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When "ON" button on remote control is pressed, there is no park at ignitor	Ignitor electrode not connected to ignitor cable	1.Reconnect ignitor cable
assembly	2. Ignitor cable pinched or wet	Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry
	3. Broken ignitor cable	3. Replace ignitor
	4.Bad ignitor	4.Replace ignitor
	5.Ignitor electrode positioned wrong	5.Adjust ignitor wires as shown in Figure 28 on page 15. Replace ignitor assembly if repositioning does not correct the problem
	6. Ignitor electrode broken	6.Replace ignitor
	7.Battery not installed, battery	7.Install new alkaline battery in
	power low or battery not installed	remote control and battery pack.
	correctly (electronic ignition mod- els only)	Verify batteries are installed cor- rectly
When "ON" button on remote control is pressed, there is spark at ignitor.	Gas supply turned off or equip- ment shutoff valve closed	Turn on gas supply or open equipment shutoff valve
but no ignition	2. Air in gas lines when installed	Repeat igniting operation until air is removed
	3.Depleted gas supply (propane/ LP only)	3.Contact local propane/LP gas company
	Control module not in REMOTE position	4. Set control module to REMOTE position
	 Gas control valve pressure setting is not correct 	 Contact qualified service person to check pressure
	6. Inlet gas pressure is too low	6.Contact local natural or propane/ LP gas company
	7.Burner orifice(s) clogged	7.Clean burner (see <u>Cleaning and</u> <u>Maintenance</u> , page 16) or replace burner orifice(s)
	Wire disconnected from gas control	8. See <i>Wiring Diagram</i> , page 17

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Delayed ignition of burner	1. Manifold pressure is too low	Contact local natural or propane/ LP gas company
	2. Burner orifice clogged	Clean burner (see <u>Cleaning and Maintenance</u> , page 16) or replace burner orifice(s)
Burner backfiring during combustion	Burner orifice is clogged or damaged	Clean burner (see <u>Cleaning and</u> <u>Maintenance</u> , page 16) or replace burner orifice
	2. Damaged burner	2. Replace damaged burner
Slight smoke or odor during initial operation	Residues from manufacturing processes and logs curing	Problem will stop after a few hours of operation
Appliance produces a whistling noise when burners are lit	1.Air in gas line	 Operate burners until air is re- moved from line. Have gas line checked by local natural or pro- pane/LP gas company
	Air passageways on appliance blocked	 Observe minimum installation clearances (see pages 9 through 11)
	Dirty or partially clogged burner orifice.	3. Clean burner (see <u>Cleaning and</u> <u>Maintenance</u> , page 16) or replace burner orifice(s)
White powder residue forming within burner box or on adjacent walls or furniture	When heated, vapors from furniture polish, wax, carpet cleaners, etc. may turn into white powder residue	Turn appliance off when using fur- niture polish, wax, carpet cleaners or similar products
Remote does not function	Battery is not installed. Battery power is low	Replace batteries in battey pack and in hand-held remote
Appliance produces a clicking/ticking noise just after burners are lit or shut off	Metal expanding while heating or contracting while cooling	This is normal with most appliances. If noise is excessive, contact qualified service person
	2. Ignitor Assembly is out of position	 Check ignitor position and adjust if needed. See Figure 29 page 15.
	3. Wind is disturbing the burner flame and the ignitor assembly is relighting the burner	 Should wind disturb the burner flame, the ignitor will automati- cally spark to relight the burner. This is normal when the appliance is installed outdoors in windy con- ditions.
	Wire connection loose or wire broken	 Check wiring connections (see <u>wiring diagram</u>, page 17). Re- place wire harness if necessary.

TROUBLESHOOTING

Continued

A WARNING: If you smell gas

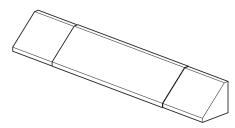
- · Shut off gas supply.
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

IMPORTANT: Operating appliance where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors. These odors will disappear over time.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Appliance produces unwanted odors	Appliance burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. (See <i>IMPORTANT</i> statement above)	Open window to ventilate room. Stop using odor causing products while appliance is running
	2.Low fuel supply (propane/LP only)	Refill supply tank (propane/LP only)
	3. Gas leak. See Warning state- ment at top of page	 Locate and correct all leaks (see <u>Checking Gas Connections</u>, page 9)
Appliance shuts off in use	1.Low line pressure	Contact local natural or propane/ LP gas company
Gas odor even when control knob is in OFF position	Gas leak. See Warning state- ment at top of page	Locate and correct all leaks (see <u>Checking Gas Connections</u> , page
	Control valve or gas control defective	9)2. Replace control valve or gas control
Gas odor during combustion	1.Gas leak. See Warning state- ment at top of page	Locate and correct all leaks (see <u>Checking Gas Connections</u> , page 9)

ACCESSORIES

Purchase these appliance accessories from your local dealer. If they can not supply these accessories, call FMI PROD-UCTS, LLC at 1-866-328-4537 for referral information. You can also write to the address listed on the back page of this manual.



FIREPLACE HOOD

Black - GA6050

Antique Brass - GA6053

For all models. Helps deflect heat away from mantel or wall above fireplace. Fits openings 28" to 48" wide.

DAMPER CLAMP - GA6080

For all models. Permanently opens chimney flue damper for vented operation.

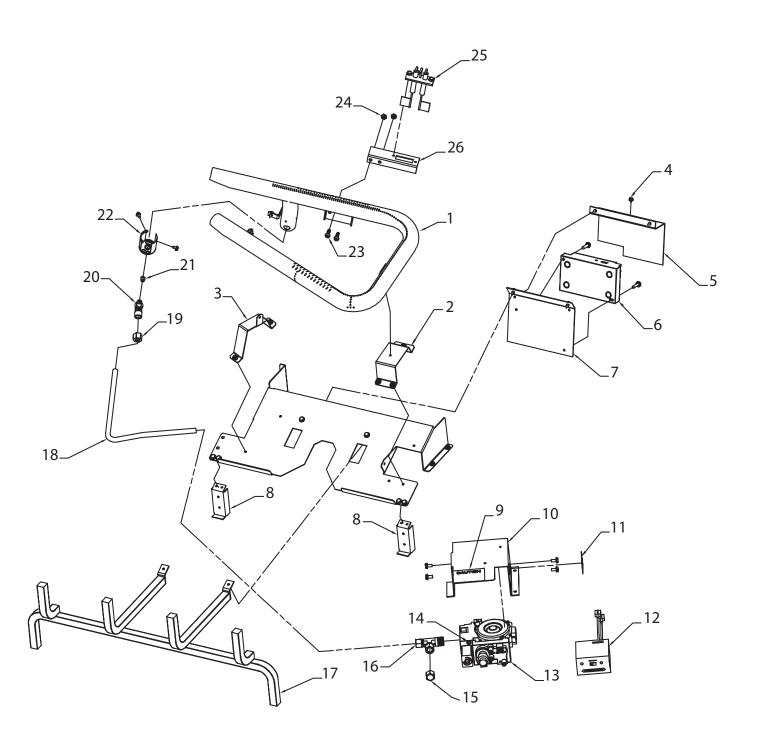
LAVA ROCK - GA6060

For all models. Order when additional rock is desired.

MAGNIFLAME ACCESORY LOG KIT - LAMF MAGNIFLAME EMBER BURNER KIT - MFEB (optional)

For wood burning fireplace.

PARTSREMOTE-READY CONTROL MODELS MF42ONE, MF42OPE, MF48ONE, MF48OPE



PARTS

REMOTE-READY MODELS MF42ONE, MF42OPE, MF48ONE, MF48OPE

This list contains replaceable parts used in your appliance. When ordering parts, follow the instructions listed under <u>Replacement Parts</u> on page 25 of this manual.

KEY			MF420NE	MF420PE	MF480NF	MF480PE	7
NO.	PART NO.	DESCRIPTION	MF	MF	MF	MF	QTY.
1	125593-01	Burner Stainless MF	•	•	•	•	1
2	125213-01	Bracket Right Burner	•	•	•	•	1
3	125213-02	Bracket Left Burner	•	•	•	•	1
4	M11084-37	Screw, HWH AB 8-18 X .25	•	•	•	•	1
5	125645-01	Shield, Control Board	•		•		1
6	125643-01	Board, Skytech AF-5000MOD Main	•	•	•	•	1
7	125644-01	Bracket, Control Board	•	•	•	•	1
8	125602-01	Leg Outdoor MF Base	•	•	•	•	2
9	100639-03	Decal, Caution 2.5 x 1.75	•	•	•	•	1
10	125641-01	Bracket, Electronic Remote Valve	•	•	•	•	1
11	103311-01	Label, Regulator	•	•	•	•	1
12	125643-06	Pack, Battery Power	•	•	•	•	1
13	125236-01	Valve Skytech AF-4004	•	•	•	•	1
14	125647-01	Screw, 0 Min Rate Skytech	•		•		1
	125647-02	Srew, 00 Min Rate Skytech		•		•	1
15	125607-01	Cap, 3/8 Compression	•	•	•	•	1
16	112823-01	T-Fitting Brass 3/8 Tube x 3/8 NPT	•	•	•	•	1
17	125603-01	Grate MF42 Stainless Steel	•	•			1
	125603-02	Grate MF48 Stainless Steel			•	•	1
18	111817-01	Flextube Dormont 3/8 X 15"	•	•	•	•	1
19	111824-01	Brass Compression Cap/Slv 3/8	•	•	•	•	1
20	124933-01	Orifice Holder, 90 Degree Elbow	•	•	•	•	1
21	099056-49	Orifice, .128	•		•		1
	099056-31	Orifice, .070		•		•	1
22	116559-02	Shutter Air	•		•		1
	116559-03	Shutter Air		•		•	1
23	120253-01	Screw Blk Pan HD PH 10-24 X 3/4"	•	•	•	•	2
24	120252-01	Nut, Hex 10-24 Blk. Finish	•	•	•	•	2
25	125643-02	Assembly, Ignitor & Flame Rod	•	•	•	•	1
26	125642-01	Bracket, Flame Rod	•	•	•	•	1

This list contains replaceable parts used in your appliance. When ordering parts, follow the instructions listed under <u>Replacement Parts</u> below.

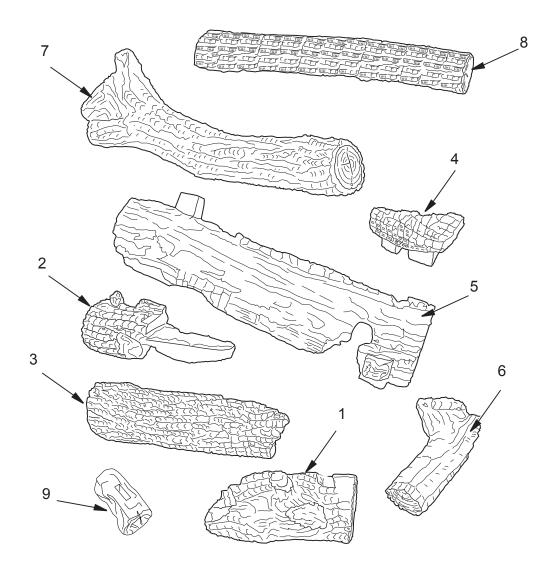
PARTS AVAILABLE, NOT SHOWN - ALL MODELS

100639-12	Caution Decal	1
101137-02	Hardware Kit	1
GA6060	Lava Rock	1
120466-01	Flextube with Fitting	1
099998-01	Fan Switch	1
125643-04	Remote Control	1

PARTS

LOG SETS FOR MODELS MF42ONE, MF42OPE, MF48ONE, MF48OPE

This list contains replaceable parts used in your appliance. When ordering parts, follow the instructions listed under <u>Replacement Parts</u> on page 25 of this manual.



	MF42O(N,P)(E)		MF48O(N,P)(E)			
KEY	Part Number	Log ID	Part Number	Log ID		
NO.		Number		Number	DESCRIPTION	QTY
1	125573-01	D-019	125591-01	D-027	Log, Front Right	1
2	125573-02	D-018	125591-02	D-026	Log, Back Left	1
3	125573-03	D-017	125591-03	D-025	Log, Front Left	1
4	125573-04	D-020	125573-04	D-020	Log, Charred	1
5	125573-05	D-021	125591-04	D-028	Log, Middle Split	1
6	125573-06	D-022	125573-06	D-022	Log, Right Split Crossover	1
7	125573-07	D-024	125573-07	D-024	Log, Front Top	1
8	125573-08	D-023	125591-06	D-029	Log, Back Top	1
9	125538-01	None	125538-01	None	Log, Switch	1

Each log includes a reference number. The first number indicates the order it is placed on the burner assembly. The next two numbers indicate the set size.

REPLACEMENT PARTS

Note: Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty. Contact authorized dealers of this product. If they can't supply original replacement part(s), call FMI PRODUCTS, LLC at 1-866-328-4537.

When calling, have ready:

- · your name
- · your address
- · model and serial numbers of your appliance
- · how appliance was malfunctioning
- · purchase date

Usually, we will ask you to return the part to the factory.

SERVICE HINTS

When Gas Pressure Is Too Low

- · burners will have delayed ignition
- · appliance will not produce specified output
- · propane/LP gas supply may be low

You may feel your gas pressure is too low. If so, contact your local propane/LP or natural gas supplier.

TECHNICAL SERVICE

You may have further questions about installation, operation or troubleshooting. If so, contact FMI PRODUCTS, LLC at 1-866-328-4537. When calling please have your model and serial numbers of your appliance ready.

You can also visit our web site at

www.fmiproducts.com.

NOTES

NOTES

WARRANTY

KEEP THIS WARRANTY

Model (located on product or identification tag)	
Serial No. (located on product or identification tag)	
Date Purchased	
Keep receipt for warranty verification.	

FMI PRODUCTS, LLC LIMITED WARRANTIES

New Products

Standard Warranty: FMI PRODUCTS, LLC warrants this new product and any parts thereof to be free from defects in material and workmanship for a period of four (4) years from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with FMI PRODUCTS, LLC's warnings and instructions.

For products purchased for commercial, industrial or rental usage, this warranty is limited to 90 days from the date of first purchase.

Factory Reconditioned Products

Limited Warranty: FMI PRODUCTS, LLC warrants factory reconditioned products and any parts thereof to be free from defects in material and workmanship for 30 days from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with FMI PRODUCTS, LLC's warnings and instructions.

Terms Common to All Warranties

The following terms apply to all of the above warranties:

Always specify model number and serial number when contacting the manufacturer. To make a claim under this warranty the bill of sale or other proof of purchase must be presented.

This warranty is extended only to the original retail purchaser when purchased from an authorized dealer, and only when installed by a qualified installer in accordance with all local codes and instructions furnished with this product.

This warranty covers the cost of part(s) required to restore this product to proper operating condition and an allowance for labor when provided by a FMI PRODUCTS, LLC Authorized Service Center or a provider approved by FMI PRODUCTS, LLC. Warranty parts must be obtained through authorized dealers of this product and/or FMI PRODUCTS, LLC who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty.

Travel, handling, transportation, diagnostic, material, labor and incidental costs associated with warranty repairs, unless expressly covered by this warranty, are not reimbursable under this warranty and are the responsibility of the owner.

Excluded from this warranty are products or parts that fail or become damaged due to misuse, accidents, improper installation, lack of proper maintenance, tampering, or alteration(s).

This is FMI PRODUCTS, LLC's exclusive warranty, and to the full extent allowed by law; this express warranty excludes any and all other warranties, express or implied, written or verbal and limits the duration of any and all implied warranties, including warranties of merchantability and fitness for a particular purpose to four (4) years on new products and 30 days on factory reconditioned products from the date of first purchase. FMI PRODUCTS, LLC makes no other warranties regarding this product.

FMI PRODUCTS, LLC's liability is limited to the purchase price of the product, and FMI PRODUCTS, LLC shall not be liable for any other damages whatsoever under any circumstances including indirect, incidental, or consequential damages.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For information about this warranty contact:

FMI PRODUCTS, LLC 2701 S. Harbor Blvd. Santa Ana, CA 92704 1-866-328-4537

www.fmiproducts.com